

**\*86034\***

Page 1

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Cust Item ID:**

**Start Date:** 19/06/2012    **Start Qty:** 6.00

\*6\*

**Required Date:** 03/07/2012      **Req'd Qty:** 6.00

\*6\*

**Customer:**

**Reference:**

Approvals: Process Plan: MLJ

Date: 12/06/20 Tooling:

Date:

Run Start \*NR1\*

**QC:**

**Date:**

**SPC (Y/N):**

Date:

Stop \*NR2\*

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 86034**

June-19-12 4:07:37 PM

**\*86034\***

Page 2

Item ID: D3494-1

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Stub Cover

Start Date: 19/06/2012 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC8- Inspect parts - second check

0.00

**\*120\***

QC

Memo

0.00

8/12/05

(X10)

Quality Control

130

Bend as per dwg

0.00

**\*130\***

Brake NC

Memo

0.00

10

JB  
12/07/03

Brake NC

140

QC5- Inspect part completeness to step on W/O

0.00

**\*140\***

QC

Memo

0.00

DAS  
16  
9-89

17/07/03

(X10)

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 86034

June-19-12 4:07:37 PM

**\*86034\***

Page 3

Item ID: D3494-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Stub Cover

Stop **\*NS2\***

Start Date: 19/06/2012 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

144

Weld per dwg A/R S.S. rod Batch: *M120013*

0.00

**\*144\***

Large Fab

Memo

0.00

Large Fab

1- WELD

2- GRIND AS PER DWG

*10* *EL 12-7-31*

146

QC10- Inspect visual per QSI004- ground welds

0.00

**\*146\***

QC

Memo

0.00

Quality Control

*DAS*  
*16*  
*8-83*

*12/08/01*

147

QC5- Inspect part completeness to step on W/O

0.00

**\*147\***

QC

Memo

0.00

Quality Control

*DAS*  
*16*  
*8-83*

*12/08/01*

*HD*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 86034

June-19-12 4:07:37 PM

**\*86034\***

Page 4

Item ID: D3494-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Stub Cover

Stop **\*NS2\***

Start Date: 19/06/2012 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

Black Sandtex(Ref:4.3.5.7) per QS1005 4.3

0.00

**\*150\***

Powdercoat

Memo

0.00

Powder Coating

Start Time: 11:30  
Temp: 3200F  
Finish Time: 12:00

10X

12/28/01

W121279

160

QC3- Inspect Part Finish

0.00

**\*160\***

QC

Memo

0.00

Quality Control

10 v 11/09/01

170

Identify as per dwg & Stock Location **220A**

0.00

**\*170\***

Packaging

Memo

0.00

Packaging

100 12/8/01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 86034

June-19-12 4:07:37 PM

**\*86034\***

Page 5

Item ID: D3494-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Stub Cover

Stop

**\*NS2\***

Start Date: 19/06/2012 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Memo

0.00

Quality Control

u 120803

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

June-19-12 4:07:41 PM

Page 1

Work Order ID: 86034

\*86034\*

Parent Item: D3494-1

\*D3494-1\*

Parent Item Name: Stub Cover

Start Date: 19/06/2012

Required Date: 03/07/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 06-05-18 JLM  
IPP rev B ecn 888 06.12.13 EC  
add welding DD 10.03.03 verify by:EC  
chg design EC verified by:DD

IPP Rev:C  
Ipp RevD ECN 10-555

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	3.5746	0.72	4.547368	7.		

\*M304S16GA\*

304/316 Sheet .063

\*\*

10-12-7-5

Location

Loc Qty

Loc Code

MAT020

3.574633

121889

3.574633

122245

(10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	86034
<b>Description:</b> Stub Cover		<b>Part Number:</b>	D3494-1
<b>Inspection Dwg:</b> D3494 <b>Rev:</b> D		<b>Page 1 of 1</b>	

☒ **First Article**
☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.208	+/-0.010	.211	2		V IBOL	
0.368	+/-0.010	.370	2		V	
0.766	+/-0.010	.769	2		V	
2.508	+/-0.010	2.523	2		V	
6.278	+/-0.010	6.275	2		V	
8.039	+/-0.010	8.033	2		PROV362	
8.437	+/-0.010	8.435	2		P	
8.805	+/-0.010	8.807	2		P	
1.832	+/-0.010	1.833	2		V	
3.262	+/-0.010	3.258	2		V	
3.604	+/-0.010	3.606	2		V	
3.940	+/-0.010	3.935	2		V	
7.544	+/-0.010	7.549	2		V	
7.887	+/-0.010	7.886	2		V	
9.317	+/-0.010	9.317	2		P	
11.148	+/-0.010	11.157	2		P	
0.060	+/-0.010	.059	2		V	

<b>Measured by:</b> RB	<b>Audited by:</b> [Signature]	<b>Preliminary Approval:</b>
<b>Date:</b> 12-7-5	<b>Date:</b> 12/07/05	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DD	
B	10.02.18	Dimensions updated per Dwg Rev C	KJ	
C	11.04.28	Dimensions updated per Dwg Rev D	KJ [Signature]	[Signature]

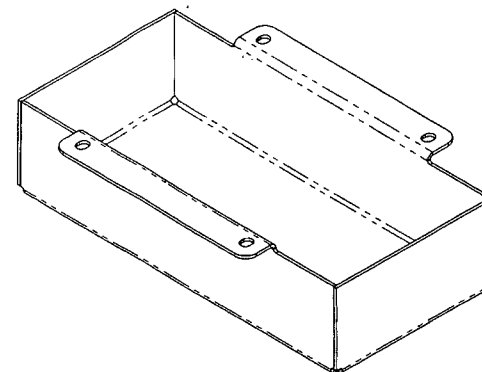
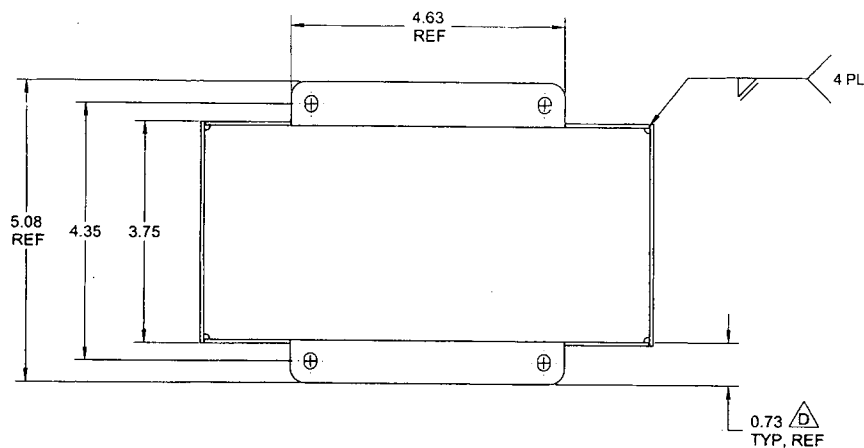
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

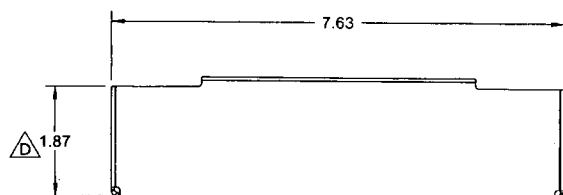
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 86034/MCJ

12/06/20



# **D3494-1 STUB COVER**

**RELEASED**  
2010-04-26  
NW

## **NOTES:**

- 1) MATERIAL: MAKE FROM D3494-1F
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3494-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.29 lbs
- 8) WELD PER DART QSI 004

D	TOLERANCE WAS 3 DEC. PLACES (ZN B5-1); 1.87 WAS 1.88 (ZN B8-1); 2.04 WAS 2.00 (ZN B3-1); REVISED D3494-1F (ZN A8-2); CORRECTED WEIGHT INFO (ZN A8-1); UPDATED MATERIAL (ZN A8-2); REASON: SEE NCR#10-037.	MB	10.04.15
C	DRAWING TRANSFERRED TO "B" SIZE. GENERAL REVISION TO FLAT PATTERN SEE PREVIOUS REV FOR DETAILS. C8-1 DIM 5.08 WAS 5.05 AND WAS A "HARD CALLOUT". C5-1 0.67 DIM WAS 0.65, B8-1 1.90 DIM WAS 1.86 B3-1 & 2.04 DIM WAS 2.00. REFER TO PAR 08-003 FOR FURTHER DETAILS.	AJS	08.10.31
B	REVISED FLAT PATTERN, BENDING DIMENSIONS, Ø0.208 X 0.288 SLOTS WERE Ø0.208 HOLES.	MB	08.11.28
A	NEW ISSUE	MB	06.01.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.04.15		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3494** REV. D  
SHEET 1 OF 2

TITLE **STUB COVER** SCALE  
NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



8.805  
8.437  
8.039

6.329  
6.278  
6.128

2.678  
2.528  
2.476

0.766  
0.368  
0

1.710  
1.832  
1.912

3.262  
3.604

3.940  
REF

7.544  
7.887

9.237  
9.317  
9.438

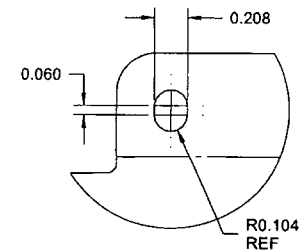
11.148

C  
SYMM

R0.25

R0.060  
TYP

C  
SYMM



**DETAIL A**  
SLOT DETAIL 4 PL  
SCALE 2X

**D3494-1F STUB COVER FLAT PATTERN**

**NOTES:**

1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.060 THICK)  
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240  
REF. DART SPEC. M304S16GA

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: SEE COMPLETED PART WEIGHT

**RELEASED**  
2010-04-26

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		<b>D3494</b>	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		<b>STUB COVER</b>	NTS
DATE	10.04.15	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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